CLAIMS

1. A forging method including a plurality of press steps for a formed product, wherein a workpiece heated due to the machining in an earlier press step(s) prior to a press step of forming the workpiece undergoes spraying with lubricant more than once; the spraying with lubricant is conducted when the lubricant sprayed in a preceding spraying has been dried; and eventually after the lubricant sprayed in the final spraying has been dried, the press step of forming the workpiece is conducted.

2. A forging method as defined in Claim 1, wherein the workpiece is a constant-velocity universal joint outer race.

3. A forging method as defined in Claim 1, wherein a temperature of the workpiece ranges from 150 to 250 °C when the workpiece is sprayed with lubricant.

4. A forging method as defined in Claim 1, wherein the lubricant before a forging procedure is a water-dispersive lubricant containing a solid lubricant agent, a lubricative and dispersive adherent agent and a wetting and vaporizing accelerating agent, and the lubricant during the forging procedure is a solid lubricant agent.

5. A forging method as defined in Claim 1, wherein the formed product is cup-shaped.

6. A forging method as defined in Claim 1, wherein the formed product is shaft-shaped.

7. A forging apparatus comprising an extruding apparatus, wherein a workpiece is successively transferred to a series of press stages; a conveying unit for successively transferring the workpiece is provided with a nozzle for spraying the workpiece with lubricant; and the workpiece and the nozzle are located in fixed relative positions to each other in spraying the workpiece with the lubricant.

8. A forging apparatus as defined in Claim 7, wherein the spraying with lubricant is conducted intermittently.

9. A forging apparatus as defined in Claim 7, wherein there are more than one of the nozzles from which the lubricant is sprayed in different directions, and the nozzles spray the lubricant in a sequential fashion.

10. A forging apparatus as defined in Claim 9, wherein after the lubricant sprayed from the nozzles has been dried, the lubricant is sprayed from the nozzles.

11. A forging apparatus as defined in Claim 7, wherein the workpiece is a constant-velocity universal joint outer race.

12. A forging apparatus as defined in Claim 7, wherein a temperature of the workpiece ranges from 150 to 250 °C when the workpiece is sprayed with lubricant.

13. A forging apparatus as defined in Claim 7, wherein the lubricant before a forging procedure is a water-dispersive lubricant containing a solid lubricant agent, a lubricative and dispersive adherent agent, and a wetting and vaporizing accelerating agent, and the lubricant during the forging procedure is a solid lubricant agent.

14. A forging apparatus as defined in Claim 7, wherein the formed product is cup-shaped.

15. A forging apparatus as defined in Claim 7, wherein the formed product is shaft-shaped.